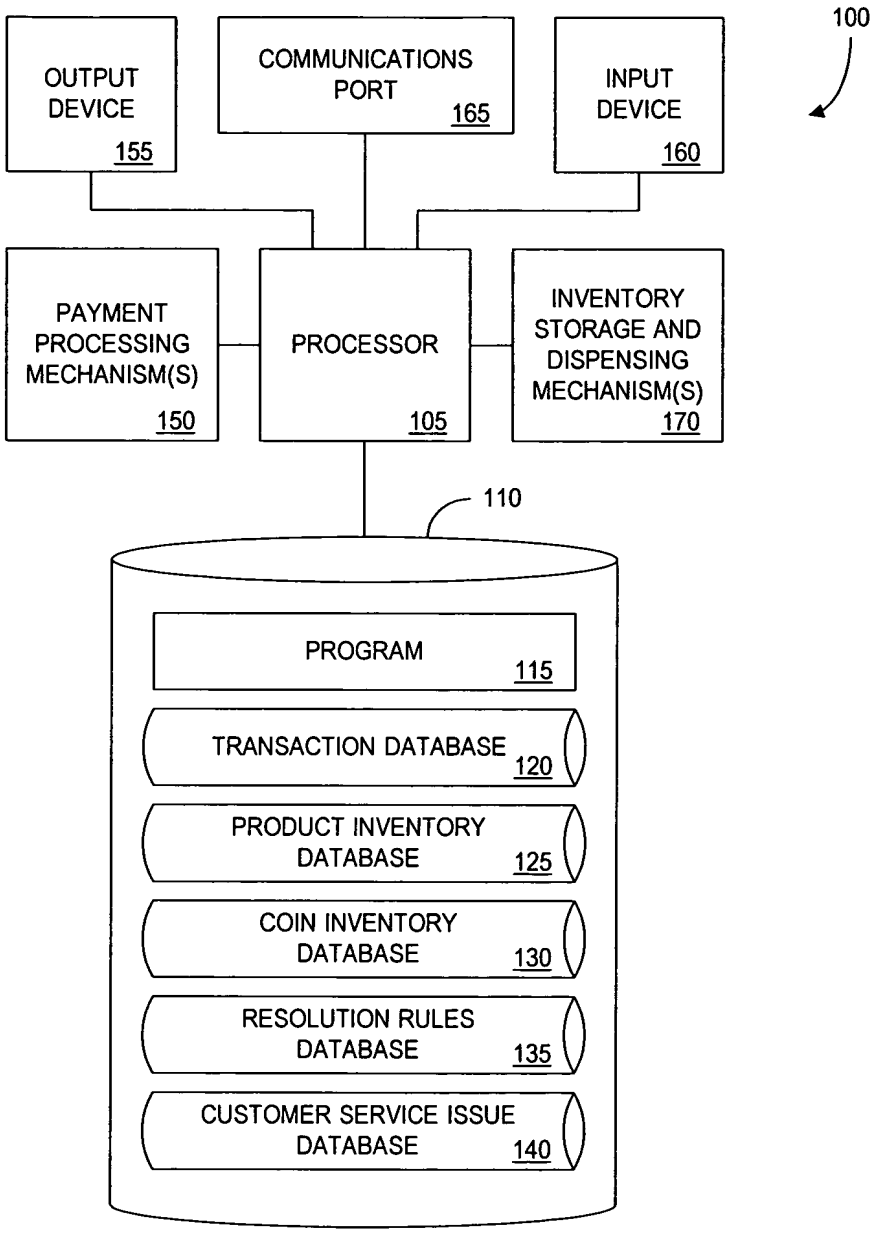
100
OUTPUT DEVICE 155
COMMUNICATIONS PORT 165
INPUT DEVICE 160
PAYMENT PROCESSING MECHANISM(S) 150
PROCESSOR 105
INVENTORY STORAGE AND DISPENSING MECHANISM(S) 170
110
PROGRAM 115
TRANSACTION DATABASE 120
PRODUCT INVENTORY DATABASE 125
COIN INVENTORY DATABASE 130
RESOLUTION RULES DATABASE 135
CUSTOMER SERVICE ISSUE DATABASE 140

FIG. 1

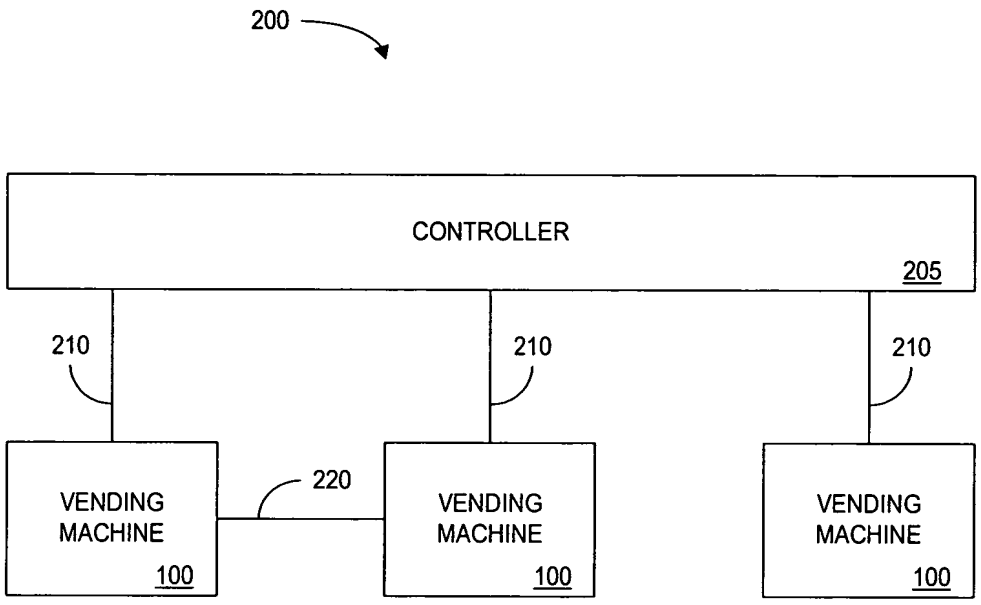
200
CONTROLLER
205
210
210
210
220
VENDING MACHINE
100
VENDING MACHINE
100
VENDING MACHINE
100

FIG. 2A

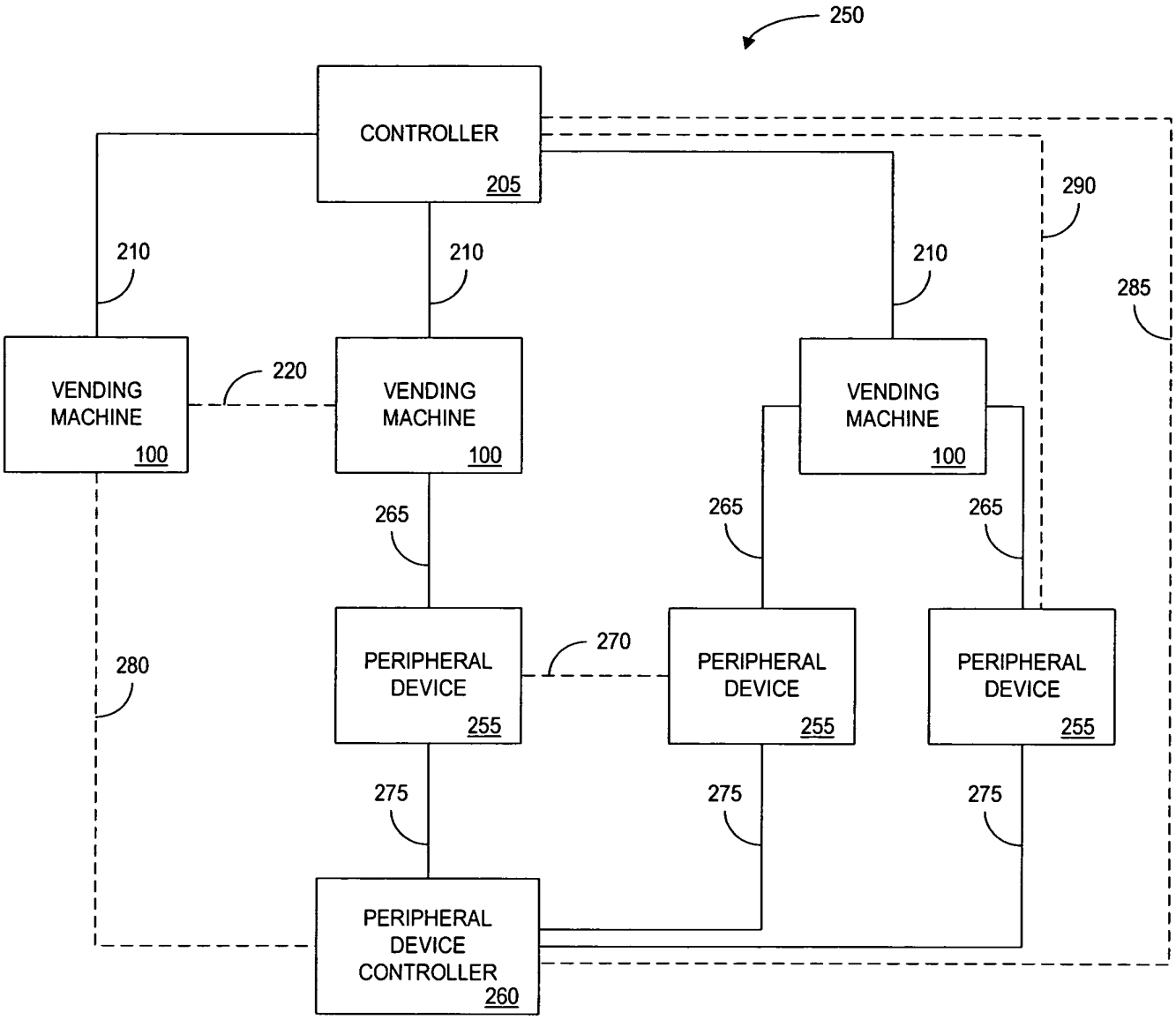
250
CONTROLLER
205
290
285
210
210
210
VENDING MACHINE
100
220
VENDING MACHINE
100
VENDING MACHINE
100
265
265
265
280
PERIPHERAL DEVICE
255
270
PERIPHERAL DEVICE
255
PERIPHERAL DEVICE
255
275
275
275
PERIPHERAL DEVICE CONTROLLER
260

FIG. 2B

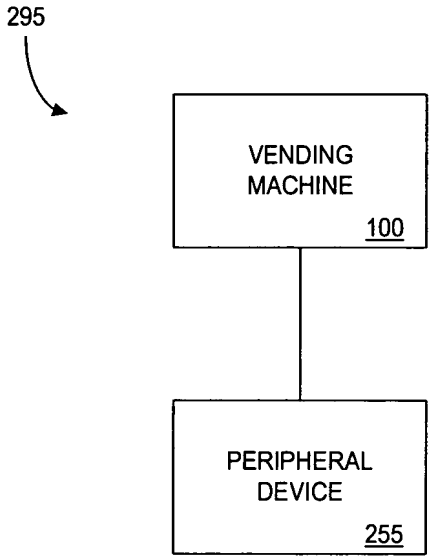

FIG. 2C

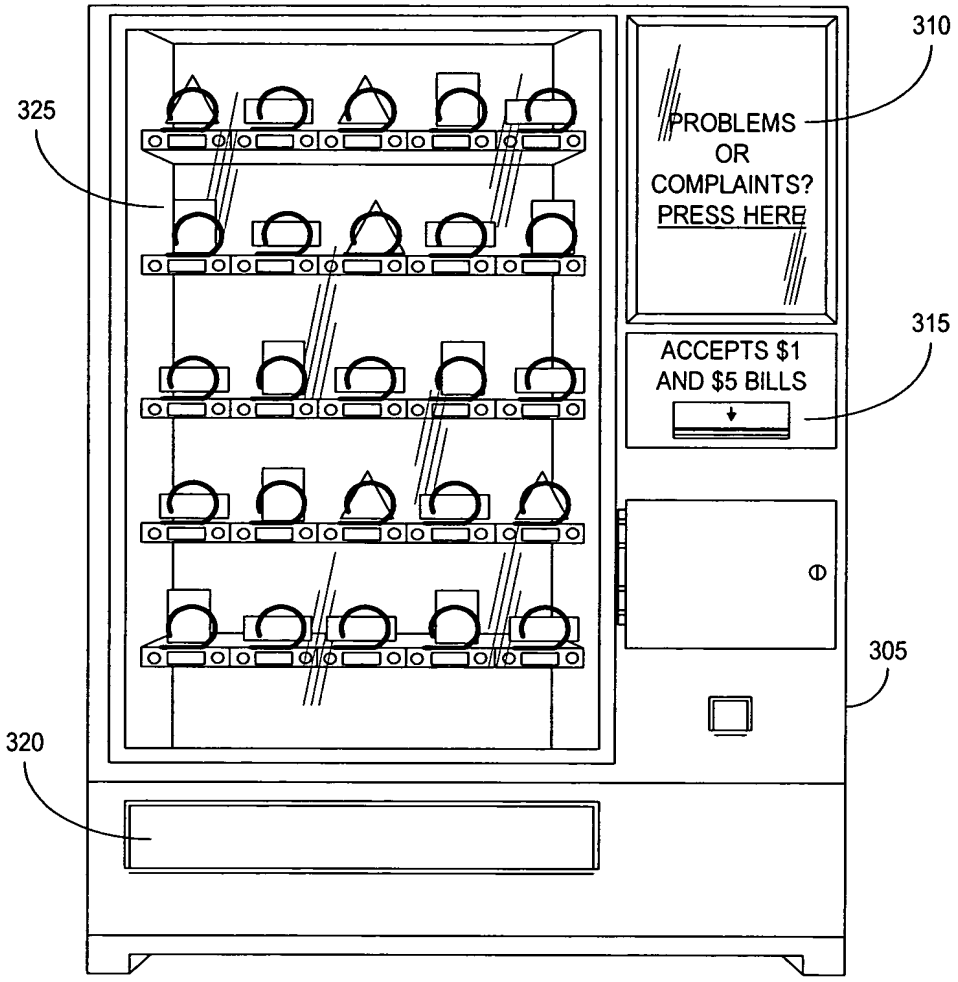
310
325
PROBLEMS
OR
COMPLAINTS?
PRESS HERE
315
ACCEPTS $1
AND $5 BILLS
305
320

FIG. 3

120

TRANSACTION IDENTIFIER	TRANSACTION DATE	TRANSACTION TIME	PRODUCT(S) PURCHASED	TRANSACTION TOTAL	
T-987654321	3/5/2003	11:00 AM	A1, B3	$1.50	
T-876543219	3/5/2003	11:38 AM	A3	$0.50	
T-765432198	3/5/2003	2:14 PM	B2, B3	$1.25	
T-654321987	3/6/2003	7:43 AM	C3	$1.00	
T-543219876	3/6/2003	9:10 AM	C1	$0.65	
T-432198765	3/6/2003	3:05 PM	C3	$1.00	

FIG. 4A

120 (CONT.)

	AMOUNT TENDERED	CHANGE DISPENSED
	$2.00	$0.50
	$1.00	$0.50
	$2.50	$0.75
	$1.00	$0
	$1.00	$0.35
	$1.00	$0

FIG. 4B

125

PRODUCT IDENTIFIER	PRODUCT DESCRIPTION	PRODUCT CATEGORY	ROW POSITION	RETAIL PRICE	
P-123456789	SNICKERS	CANDY	A1	$0.75	
P-234567891	MILKY WAY	CANDY	A2	$0.50	
P-345678912	M&MS	CANDY	A3	$0.50	
P-456789123	LAYS	CHIPS	B1	$0.75	
P-567891234	DORITOS	CHIPS	B2	$0.50	
P-678912345	CHEETOS	CHIPS	B3	$0.75	
P-789123456	SODA X	SODA	C1	$0.65	
P-891234567	SODA Y	SODA	C2	$0.65	
P-912345678	SODA Z	SODA	C3	$1.00	

FIG. 5A

125 (CONT.)

	MINIMUM SELLING PRICE	COST	ACTUAL (CURRENT) PRODUCT VELOCITY	IDEAL PRODUCT VELOCITY	CURRENT NUMBER IN STOCK
	$0.40	$0.20	0.5 / DAY	3.0 / DAY	5
	$0.40	$0.20	0 / DAY	3.0 / DAY	4
	$0.35	$0.25	0.5 / DAY	4.0 / DAY	3
	$0.35	$0.20	0 / DAY	3.0 / DAY	6
	$0.25	$0.20	0.5 / DAY	2.0 / DAY	4
	$0.35	$0.27	1.0 / DAY	2.0 / DAY	5
	$0.50	$0.25	0.5 / DAY	3.0 / DAY	4
	$0.50	$0.20	0 / DAY	2.0 / DAY	2
	$0.75	$0.30	1.0 / DAY	3.0 / DAY	2

FIG. 5B

130

COIN DENOMINATION	QUANTITY
$1.00	2
$0.50	0
$0.25	2
$0.10	7
$0.05	4
$0.01	0

FIG. 6

135

CONDITION	RESOLUTION
IF PRODUCT JAM; AND AVERAGE ACTUAL ITEM VELOCITY FOR OTHER PRODUCTS IN SAME CATEGORY MEETS OR EXCEEDS AVERAGE IDEAL ITEM VELOCITY FOR OTHER PRODUCTS IN SAME CATEGORY; AND COIN INVENTORY (LESS DEPOSIT AMOUNT) EXCEEDS ANTICIPATED AMOUNT NEEDED TO MAKE CHANGE FOR FUTURE CUSTOMERS WITHIN FILL PERIOD	THEN COIN REFUND
IF PRODUCT JAM; AND AVERAGE ACTUAL ITEM VELOCITY FOR OTHER PRODUCTS IN SAME CATEGORY IS LESS THAN AVERAGE IDEAL ITEM VELOCITY FOR OTHER PRODUCTS IN SAME CATEGORY; AND COIN INVENTORY (LESS DEPOSIT AMOUNT) IS LESS THAN ANTICIPATED AMOUNT NEEDED TO MAKE CHANGE FOR FUTURE CUSTOMERS WITHIN FILL PERIOD	THEN SUBSTITUTE PRODUCT OFFER, WHERE PRODUCT IS FROM SAME CATEGORY AS INITIALLY REQUESTED PRODUCT

FIG. 7

140

CUSTOMER SERVICE ISSUE IDENTIFIER	DESCRIPTION OF CUSTOMER SERVICE ISSUE (DIAGNOSTIC DATA, ETC)	VALIDATED BY OPERATOR ?	RESOLUTION	RESOLUTION REDEEMED?
BILL@XYZ.COM	CUSTOMER STATES SNICKERS DID NOT VEND; ROW A1 SENSOR FIRED; DELIVERY BIN SENSOR DID NOT FIRE	YES	$2.00 IN MACHINE CREDIT; COMPENSATION CODE = 183756	NO

FIG. 8

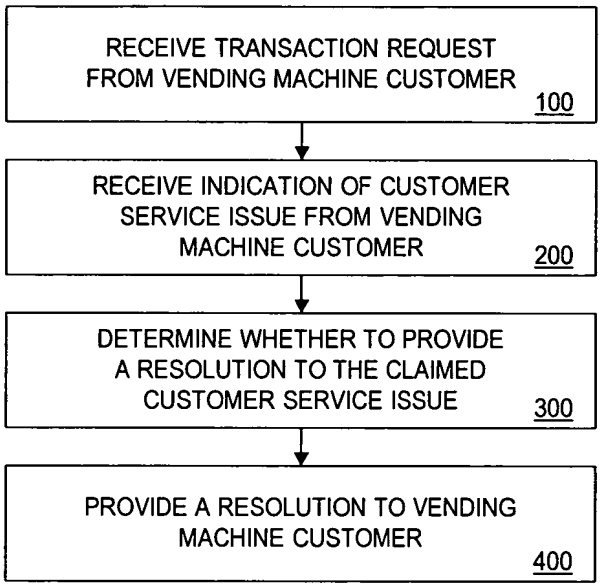
RECEIVE TRANSACTION REQUEST FROM VENDING MACHINE CUSTOMER
100
RECEIVE INDICATION OF CUSTOMER SERVICE ISSUE FROM VENDING MACHINE CUSTOMER
200
DETERMINE WHETHER TO PROVIDE A RESOLUTION TO THE CLAIMED CUSTOMER SERVICE ISSUE
300
PROVIDE A RESOLUTION TO VENDING MACHINE CUSTOMER
400

FIG. 9

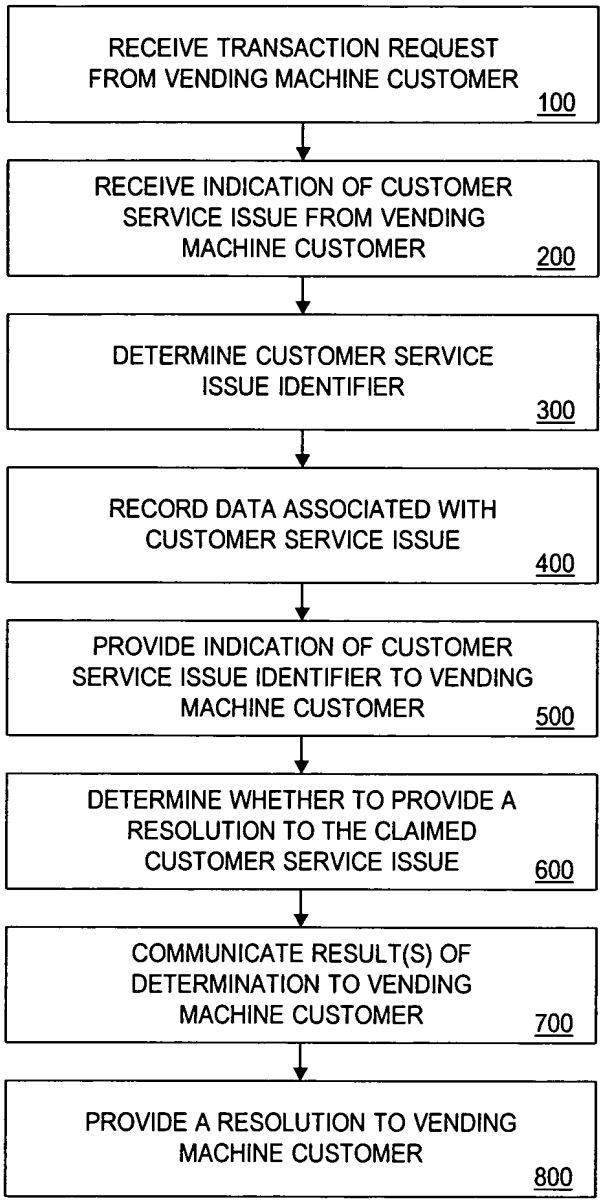
RECEIVE TRANSACTION REQUEST FROM VENDING MACHINE CUSTOMER
100
RECEIVE INDICATION OF CUSTOMER SERVICE ISSUE FROM VENDING MACHINE CUSTOMER
200
DETERMINE CUSTOMER SERVICE ISSUE IDENTIFIER
300
RECORD DATA ASSOCIATED WITH CUSTOMER SERVICE ISSUE
400
PROVIDE INDICATION OF CUSTOMER SERVICE ISSUE IDENTIFIER TO VENDING MACHINE CUSTOMER
500
DETERMINE WHETHER TO PROVIDE A RESOLUTION TO THE CLAIMED CUSTOMER SERVICE ISSUE
600
COMMUNICATE RESULT(S) OF DETERMINATION TO VENDING MACHINE CUSTOMER
700
PROVIDE A RESOLUTION TO VENDING MACHINE CUSTOMER
800

FIG. 10